Agenda

30 min	Workshop Overview and Software Installation
45 min	Working with Survey Data: Using ArcGIS, 3D Analyst, Spatial Analyst, and custom ArcGIS tools, the participant will learn how to manipulate survey data and create raster surfaces that represent a computed difference between existing surfaces.
45 min	*Shoreline Vectors:* Using raster grid surfaces, the participant will learn how to delineate and modify shoreline vectors into GIS-ready feature classes using the 3D Analyst extension in ArcGIS. The Digital Shoreline Analysis System application will also be applied to allow the participant to calculate and view shoreline erosion and accretion.
15 min	*COFFEE BREAK*
20 min	*Using LIDAR Analyst to Extract Building Footprints (Instructor Demo):* Building footprints are among the many features that can be extracted from lidar data. The instructor will perform a demonstration on the steps required to extract such datasets.
20 min	*Using Building Footprints to Determine Cost: (Instructor Demo):* Participants will learn how to use the vector building footprint data (extracted from lidar data) in the ArcGIS environment to calculate cost related to pre- and post- storm events.

Using GIS for Coastal Data Analysis

Exercise A	Importing Beach Profile (Distance Azimuth) Data
Exercise B	Clipping Raster Surfaces
Exercise C	Symbolizing Elevation Data
Exercise D	Comparing Raster Surfaces
Demo	Demonstration of Additional Tools (COSCA & Shoreline Classification)
Exercise E	Extracting a Vector Shoreline
Exercise F	Using the DSAS Extension
Demo	Lidar Analyst Demonstration